



**Proceedings of Meeting of
Heads of Institutes/Centres of Forestry Research Related**

To

**“SUSTAINABLE FOREST MANAGEMENT, CLIMATE CHANGE
RELATED TO FORESTRY AND MOUNTAIN ECOSYSTEMS IN THE
SAARC REGION”**

(10 – 11 October 2012)

Organized by SAARC Forestry Centre

Taba

THIMPHU, BHUTAN

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Background Information

The SAARC Environment Action Plan launched in 1997 constitutes the main basis of regional cooperation under the rubric of environment in SAARC. It largely draws its recommendation from the two seminal Studies referred to below. The Plan assesses the status of cooperation in environment, identifies concerns of the Member States at the regional and global levels and sets out parameters and modalities for enhanced collaboration in the region. An important facet of the Plan is the establishment of two Regional Institutions which would serve as lynch pins to move forward regional cooperation in environment. These Institutions are the SAARC Forestry Centre (SFC) and the SAARC Coastal Zone Management Centre (SCZMC).

The Sixth Ministerial Meeting of the SAARC Environment Ministers (Thimphu, 12-13 June 2004) considered the recommendation of the First SAARC Technical Committee on Environment and Forestry (Thimphu, 11-12 June 2004) for establishing the SFC in Bhutan. The meeting decided on the need to formulate the aims and objectives of the centre, establish an operating modal and collaborative networking and form linkages among forestry and environmental institutions of the SAARC States. In July 2004, the Twenty-fifth Session of the SAARC Council of Ministers (Islamabad, 20-21 July 2004) approved the establishment of the SFC in Bhutan.

During the Thirteenth SAARC Summit (Dhaka, 12-13 November 2005) the Heads of State or Government welcomed the decision of the SAARC Council of Ministers to establish a SAARC Forestry Centre in Bhutan. The Leaders emphasized on the need for the Centre to have a coordinating role in the field of Forestry for exchange of information, expertise, training and formulation of regional projects with emphasis on social forestry.

Protection and preservation of Environment continues to be accorded the highest priority in the development policies of the Royal Government of Bhutan. Bhutan's track record in environmental conservation and forest management has received recognition in the region and beyond. The Royal Government of Bhutan has adopted a policy to always maintain the country's forest cover at a minimum of 60 percent of the land area, and this is also a constitutional requirement for the benefit of the present and future generations. At present, Bhutan has 72 percent of its land area under forest cover, of which 26 percent are protected areas and an additional 9 percent are biological corridors. Bhutan can share its experience with other SAARC Member States with a view to promoting regional cooperation in the field of conservation and management of environment.

Importantly, the decision to establish the SFC reflects the priority accorded by the SAARC Member States towards conservation of the environment and the commitment to avert natural disasters associated with the degradation of natural environments after critical analysis of the following studies:

- The SAARC Regional Study on the Causes and Consequences of Natural Disasters and the Protection and Preservation of the Environment.
- The SAARC Regional Study on Greenhouse Effect and its Impact on the Region.
- SAARC Plan of Action on Environment.

- The Colombo Declaration for a Common Environment Programme.

One-third of global biodiversity can be found within the SAARC region for which forest provide habitat for the diverse endemic and endangered species of flora and fauna. The region is also a centre of origin for many of the important domesticated crops and has representation of all the biomes of the world.

The forests of South Asia constitute an immense renewable resource and make a vital contribution to the environment, societies and economies of the region. Being a primary resource, forest resources play a crucial role in the lives of all the SAARC Member States and provide employment to millions of people. The forest provides direct livelihoods, helps sustain productivity of agricultural and livestock development, and generate income from wood-based industries and hydropower. The forests and forest resources of the SAARC States are, therefore of vital importance for the member countries as well as to the world at large.

Several South Asian countries are leaders in participatory forest management and committed to the principles of sustainable forest management (SFM).

However, due to intense population pressure on the forest resources, it makes sustainable forest management a challenging task.

Concurrently, the region is also characterized by diverse cultures, politics, economics, ecology, and environment, where rigid cultural and bureaucratic mechanisms cause considerable inertia amidst otherwise rapid change. Institutions and groups that traditionally controlled forest management loathe giving up the economic benefits, power and prestige associated with forest resources. However, the countries are strongly linked through the aspirations of their people to deal with the issues related to globalization in a unified manner as a regional group.

According to a FAO report (2001), the forest area of South Asia amounts approximately 7.7 million hectares, equal to around three percent of global forest cover. The total forest area in the region declined by 0.9 million hectares during the 1990s, with an annual rate of decrease of 1.2 percent, which is the highest rate of loss of forest area. The most significant contributors to deforestation are mainly of major forest fires and clearance of forested land for agricultural purposes.

As of 2008, no common institution in area of forest and environment was established for the SAARC States to deal with common issues related to forest and environment. Therefore, the establishment of the SFC in Bhutan provided an arena to discuss and deal the issues, thus fulfilling the basic aspiration of the Charter of the SAARC, namely:

- a) The SAARC Member States should recognize that the increased cooperation, contacts and exchanges among countries of the region will contribute to the promotion of friendship and understanding of their people;

- b) The member countries should be aware of the common problems, interests and aspirations of the people of South Asia and the need for joint action and enhanced cooperation within their respective political systems and cultural traditions; and
- c) Should be convinced that regional cooperation among the countries of South Asia is mutually beneficial, desirable and necessary for promoting the welfare and improving the quality of life of the people of the region.

Vision

Protection, conservation and prudent use of forest resources by adopting sustainable forest management paradigm through research, education and coordination among the SAARC member countries to contribute towards sustainable development and conservation of global environment.

Mandates

- a) Promotion of research, education and extension in sustainable forestry management (SFM) and conservation within the SAARC region;
- b) Development of regional information and knowledge-based centre on forest resources, and facilitate dissemination and networking among the SAARC Member States;
- c) Enhancement of management capacity for sustaining mountain forest ecosystems and its environmental services; and
- d) Promotion of participatory forestry for improvement of rural livelihoods, and local forest management.

Therefore, the SAARC Forestry Center, Thimphu is mandated to foster cooperation among forestry organizations and professionals within in the South-Asian region.

Minutes of Meeting

The meeting was held from 10 – 11 October 2012 at Thimphu to discuss on areas of collaborative research. The meeting was attended by Dr. N.S Bisht, Director (International Cooperation), Indian Council of Forestry Research and Education (ICFRE), India, Dr Md. Mokhlesur Rahman, Director and Dr. Shaaheen Akhter, Chief Research Officer, Bangladesh Forest Research Institute (BFRI), Bangladesh, Professor Chiranjibi Prasad Upadhaya, Dean, Institute of Forest (IOF), Nepal, Dr. Kinley Tenzin, Programme Director, Renewable Natural Resource Research and Development Centre (RNR RDC), Bhutan, Mr. Sangay Wangchuk, Dean, Ugyen Wangchuck Institute for Conservation and Environment (UWICE) and Mr. Norbu Wangdi, Lecturer, UWICE, Bhutan.

Dr. Sangay Wangchuk, Director, SAARC Forestry Centre, Thimphu, Bhutan, Mr. Pasang N Wangchen, Specialist, Sustainable Forest Management Division and Mr. Karma J Tempel, Specialist, Participatory Forest Management Division of SAARC Forestry Centre, Thimphu, Bhutan participated from the SFC.

After introduction of the Participants, the Meeting started with detail presentation on their Research Institutes/Centres that was followed by discussions (refer annexure for all presentations)

The Director, SAARC Forestry Centre presented the Draft Proposal/Concept Note on research areas of collaboration to the participants. After the presentation, each component of the Draft Proposal was thoroughly discussed. At the end of the presentation, it was agreed that after incorporating all comments and suggestions from the participants, the Proposal would be followed up by the SFC through established channel of SAARC for implementation. The following are the agreed areas of Forestry and environment related collaboration:

A Collaborative research in Natural Resource Management:

- Valuation of ecosystem goods & services and develop PES Mechanism for local communities
- Studies on carbon stocks, and impacts, vulnerability and adaptations of Himalayan ecosystems to climate change.
- Establishment of a Trans-boundary Forest Fire Information System.
- Collaborative studies and implementation of Joint Forest Management/ CFM/PFM.
- Sustainable management of NTFPs, aromatic plants & bamboos.

- Sustainable management of forest for improvement of livelihood of local communities.
- Assessment and preservation of Biodiversity in mountain eco-systems.
- Impacts of Invasive species.
- Human wildlife conflict mitigation approaches.
- Management of reptilian species.

B Sharing of established technologies and experiences

1. Over the last few decades, various premier institutes such as BFRI, RNRDC, UWICE, Council of Renewable Natural Resource Research of Bhutan (CoRRB), ICFRE and IOF have developed a large number of technologies in the fields of silviculture, forest management, breeding of important timber species, Wood Science, Chemistry of forest products, Agroforestry, Bamboo resource development and many other relevant technologies and experiences, which can be shared amongst Member States, policy makers, farmers and small & medium enterprises for livelihood support and economic gains. However, exchange of research materials will be guided by prevailing Material Transfer Laws of respective Member States.

C Establishment of institutional linkages

- Establishment and augmentation of SAARC-FRI fellowship programme.
- Increase of SAARC-FRI Forestry Fellowship from 10 to 25 slots
- Exchange programme for capacity building of researchers, professionals & policy makers, academicians & students.
- Institutional linkages in the region to facilitate knowledge sharing by interactive visits, participation in workshops/seminars/symposiums.
- Enhanced cooperation in forestry sector to facilitate research & development in various fields in this sector.
- Developing and implementing collaborative research programmes/projects amongst the Member States.
- Preparing joint projects of regional importance for funding by International agencies.

The meeting ended with the Director, SAARC Forestry Centre offering a vote of thanks to all the Heads of the Research Institutes for attending the Meeting and their contribution to the Proposal. It was agreed to conduct next meeting to propose and finalize the mechanism of operation of those identified research topics. The Bangladesh Forest Research Institute, Bangladesh offered to host the next meeting.

Working Paper for the Meeting of Heads of Institutes/Centres of Forestry Research Related to Sustainable Forest Management, Climate Change related to Forestry, and Mountain Ecosystems in the SAARC Region”

Concept note

Collaborative Forestry Research between Bangladesh Forestry Research Institute, Indian Council of Forestry & Research, Dehradun, Institute of Forestry, Pokhara, Nepal, Renewable Natural Resources Research Centre, Bhutan and SAARC Forestry Centre, Thimphu.

SESSION ONE: Stock Taking – Present Status

Substantial research in the fields of sustainable forest management, climate change related to forestry, mountain ecosystems and contribution of forestry to improvement of livelihoods of people have been carried out by premier Forest Research Institutes and Centres within the SAARC Region. As the role of forests change over time, and become more complex, there is a need for the scientists to work together to ensure productive use of limited financial resources within the SAARC as a Region, and share the useful research data among the Member States. Therefore, the SAARC Forestry Centre has invited the Heads of relevant Forestry Research Institutes and Centres dealing in sustainable forest management, climate change related to forestry, and mountain ecosystems in the SAARC Region to Bhutan to share their success stories and suggest how we could move forward SAARC as a Region.

The Heads of the Institute/Centre will make a presentation covering the following:

- Present status of research programme on sustainable forest management, climate change related to forestry such as carbon stock measurement, and mountain ecosystems
- Linkages with other Institutes/Centres on forestry related to sustainable forest management, climate change and mountain ecosystems within the country and outside
- Any other information relevant to the Meeting

- 1. Bangladesh**
- 2. India**
- 3. Nepal**
- 4. Bhutan**

The delegates are encouraged to bring along any relevant publications for sharing among the other delegates and the SFC either in the form of hard or electronic copies.

Expected Outcome of the SESSION ONE

1. Delegates well informed of research being carried out in respective Institutes and Centres relating to sustainable forest management, climate change, mountain ecosystem, technology generation and other relevant research being carried out that would be relevant for the SAARC Member States.

SESSION TWO: Discussion and Draft Proposal

The SAARC Forestry Centre has been directed by various Higher Bodies of SAARC such as Ministerial Level Meetings, the SAARC Technical Committee on Forestry and Environment, SAARC Inter-governmental Expert Group Meeting on Climate Change, The Thimphu Declaration on Climate Change (Sixteenth SAARC Submit 2010), The Mountain Initiative, SAARC Action Plan on Climate Change and Dhaka Declaration on Climate Change (Copies are annexed) to facilitate the implementation of relevant recommendations of these SAARC Bodies by the Member States. Accordingly, the SAARC Forestry Centre appraised the Governing Board of the directions from concerned Higher Bodies of SAARC about the responsibilities of the SAARC Forestry Centre to facilitate in achieving the wishes of the leaders of the Member States contained in the above mentioned Inter-governmental Committees, Working and Expert Groups, etc relating to sustainable forestry research, climate change and mountain ecosystem.

SAARC Forestry Centre, amongst others, consider one of the starting points to facilitate the implementation of the recommendations contained in the various Declarations and Initiatives is to bring together the Heads of Forest Research Institutes and Centres dealing in sustainable forest management, climate change and mountain ecosystems within the SAARC Region. At such a Meeting, the Heads could inform each other on the success stories of research programmes of their respective Institutes and Centres. It is expected through such a process, the Heads of the Research Institutes and Centres could share the status of research in the concerned fields, and their focus of research in the future. This will also ensure that we avoid reinventing the wheel and add value to the findings of the research programme by developing professional linkages among the Research Institutes and Centres in the SAARC Region.

For the purpose of starting discussion on the Areas of Collaboration and Development of Linkages among the Forest Research Institutes and Centres in the SAARC, the SAARC Forestry Centre, in collaboration with Indian Council for Forestry Research and Education developed a Concept Paper on Collaborative Forestry Research within the SAARC Region with particular focus on research related to sustainable forest management, climate change and carbon stock measurement, mountain ecosystem, transfer of technology in the field of forestry and development of effective linkages among the Forestry Research Centres within the SAARC Region. The Draft Proposal in the form of Concept Note is presented below.

PROPOSED AREAS OF COLLABORATION

A Collaborative research in Natural Resource Management:

- Assessment of ecosystem goods & services and forest hydrology including runoffs, soil erosion and water quality regimes in mountain ecosystems
- Studies on carbon stocks, and impacts, vulnerability and adaptations of Himalayan ecosystems to climate change.
- Establishment of a Transboundary Forest Fire Information System.
- Collaborative studies and implementation of Joint Forest Management/ CFM/PFM
- Sustainable management of high altitude NTFPs & aromatic plants.
- Assessment and preservation of Biodiversity in mountain eco-systems.

B Transfer of established technologies

- Over the last few decades, the various institutes of ICFRE have developed a large number of technologies, which can be transferred to user agencies especially farmers and small & medium enterprises for livelihood support and economic gains. The major technologies are in the fields of tree breeding programme of important timber species, Wood Science and Technology, Chemistry of Forest products, Agroforestry, Bamboo resource development etc., which can be transferred to user agencies in other countries. Similarly exchange of technologies developed in other countries is key to the scientific management and be attempted.

C Establishment of institutional linkages

- Establishment and augmentation of SAARC-FRI fellowship programme.
- Exchange programme for capacity building of researchers, professionals & policy makers, academicians & students.
- Institutional linkages in the region to facilitate knowledge sharing by interactive visits, participation in workshops/seminars/symposiums.
- Enhanced cooperation in forestry sector to facilitate research & development in various fields in this sector.

To operationalise the aforesaid programmes/activities it is envisaged to establish a “**South East Asia Forestry Research Network**”. Further, a “**SAARC Capital Corpus Fund**” with an appropriate seed money is also proposed be established to support the collaborative research, education and extension among SAARC nations, and to fund the initiatives under research infrastructure augmentation & capacity building in the SAARC countries.

Expected outcome of SESSION TWO

1. The Draft Proposal discussed in detail among the delegates
2. All relevant suggestions, wherever appropriate, included in the final Draft Proposal
3. A final Draft Proposal included in the Report of the Meeting

SESSION THREE: WAY-FORWARD - Proposal on the operationalization of Collaboration and Linkages

Based on the final Draft Proposal, the delegates will discuss on the following issues:

1. Areas of Collaboration

The Delegates will discuss “Areas of Collaboration” in the field of sustainable forest management, climate change, livelihood related to forestry, mountain ecosystems and any other areas that the Delegates consider appropriate. Based on the consensus, the Draft Proposal on the “Areas of Collaboration” is expected to be finalized. This Draft “Areas of Collaboration” may be discussed with the Institutes and Centres in their respective Member States. The SAARC Forestry Centre will follow-up on with the concerned Institutes and Centres on the follow-up in the implementation of the Proposal based on a time frame agreed at the Meeting.

2. Mechanism of Collaboration and Development of Linkages

The Meeting will agree on a Draft Proposal on the Mechanism of Collaboration and Linkages among the Research Institutes and Centres. This Draft Collaboration and Linkages Mechanism could be discussed with the respective Institutes and Centres for final implementation by the Delegates in their Member States. The SAARC Forestry Centre will facilitate the implementation of the collaboration and strengthening of the linkages through the established channel of communication established by the SAARC Higher Bodies based on an agreed time frame

Annexure – II: Programme

Venue: Hotel Riverview

DAY ONE: 10.10.2012

OPENING SESSION

0930 Hrs	Welcome address	SAARC Forestry Centre
0940 Hrs	Statements by Delegates	BFRI, Bangladesh ICFRE, India IOF, Nepal CoRRB, RNR RC, UWICE, Bhutan
1030 Hrs	<i>Tea/Coffee and Snacks</i>	

STOCKING TAKING SESSION

1100 Hrs	Presentation of Status of Forest Research Programmes	Bangladesh India Nepal Bhutan
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Discussion of Draft Proposal Session

1400 Hrs	Presentation of Draft Proposal	SAARC Forestry Centre
1530 Hrs	<i>Tea/Coffee and Snacks</i>	
1600 Hrs	Finalization of Draft Proposal	
1730 Hrs	Closing Session for Day One	
1900 Hrs	Official Dinner	

DAY TWO: 11.10.2012

1000 Hrs **Draft Proposal on Way-Forward** Delegates

1530 Hrs **Adoption of Report/Close
Meeting**

BFRI – Bangladesh Forest Research Institute, ICFRE – Indian Council of Forestry & Research , IOF - Institute of Forestry, Council of Renewable Natural Resources Research of Bhutan, RNR RC - Renewable Natural Resources Research Centre, UWICE – Ugyen Wangchuck Institute for Conservation and Environment.

**Presentations slides of Four Countries -
BFRI of Bangladesh, RNR RDC and UWICE of
Bhutan, ICFRE of India and IOF of Nepal**

**Annexure – III: Presentation by Bangladesh Forest Research Institute,
BANGLADESH**

Annexure – IV: Presentation by RNR Research Centre, BHUTAN

**Annex – III: Presentation by Ugyen Wangchuck Institute for
Conservation and Environment**

**Annexure – V: Presentation by Indian Council of Forestry Research and
Education, INDIA**

Annexure - VI: Second Meeting of the Inter-Governmental Expert Group in Climate Change

South Asian Association for Regional Cooperation



Second Meeting of the Inter-governmental Expert Group on Climate Change

SAARC Secretariat, Kathmandu, 16 – 17 April 2012

SAARCIGEG.CC-II/03

The Thimphu Statement on Climate Change

*(Adopted by Heads of State or Government during the Sixteenth SAARC Summit
Held in Thimphu, 28-29 April 2010)*

The Sixteenth Meeting of the Heads of State or Government of the Member States of the South Asian Association for Regional Cooperation (SAARC) in Thimphu, Bhutan, on 28-29 April 2010,

Recalling the high priority attached by the Leaders of SAARC at successive Summits towards preserving and sustainably managing the rich, fragile and diverse ecosystems of South Asia;

Expressing deep concern about the adverse effects of climate change and its impact on the region, particularly on the lives and livelihoods of the 1.6 billion people of South Asia;

Recognizing that effective responses, both on mitigation and adaptation should be formulated and implemented at regional and international levels;

Mindful that while South Asia's contribution to climate change is minimal, the impacts of this global phenomenon transcends national boundaries;

Also Mindful that the Member States of SAARC as developing countries face the dual challenge of addressing the negative impacts of climate change and pursuing socio-economic development;

Emphasizing the overriding importance of socio-economic development and poverty eradication in our region, and convinced that reducing dependence on carbon in economic growth and promoting climate resilience will promote both development and poverty eradication in a sustainable manner;

Determined that South Asia should become a world leader in low-carbon technologies and renewable energy;

Reiterating the principles of equity, and common but differentiated responsibilities and respective capabilities as enshrined in the UN Framework Convention on Climate Change to be the basis for an agreed outcome in the global negotiations on climate change;

Also underlining that an agreed outcome of the global negotiations must emerge from an inclusive, transparent, open and democratic process of negotiations;

Noting that South Asia is particularly prone to climate change and related disasters making the need for a regional response to meet the challenge of climate change more urgent and compelling;

Welcoming the adoption of Climate Change as the theme of the Sixteenth SAARC Summit as an important initiative to galvanize and consolidate regional endeavors with the objective of making South Asia climate change resilient;

Also Welcoming the signing of the SAARC Convention on Cooperation on Environment as a significant step towards promoting and strengthening regional cooperation;

Convinced that South Asia could benefit from cooperative regional initiatives and approaches, exchange of experiences, knowledge, transfer of technology, best practices to address the challenges posed by climate change;

Aware that preservation of environment and mitigating the impacts of climate change are mutually reinforcing;

Determined to address the adverse effects of climate change in accordance with the purposes and principles of regional cooperation enshrined in the SAARC Charter;

Hereby adopt the Thimphu Statement on Climate Change and agree to undertake the following:

- (i) Review the implementation of the Dhaka Declaration and SAARC Action Plan on Climate Change and ensure its timely implementation;

- (ii) Agree to establish an Inter-governmental Expert Group on Climate Change to develop clear policy direction and guidance for regional cooperation as envisaged in the SAARC Action Plan on Climate Change;
- (iii) Direct the Secretary General to commission a study for presentation to the Seventeenth SAARC Summit on 'Climate Risks in the Region: ways to comprehensively address the related social, economic and environmental challenges';
- (iv) Undertake advocacy and awareness programs on climate change, among others, to promote the use of green technology and best practices to promote low-carbon sustainable and inclusive development of the region;
- (v) Commission a study to explore the feasibility of establishing a SAARC mechanism which would provide capital for projects that promote low-carbon technology and renewable energy; and a Low-carbon Research and Development Institute in South Asian University;
- (vi) Incorporate science-based materials in educational curricula to promote better understanding of the science and adverse effects of climate change;
- (vii) Plant ten million trees over the next five years (2010-2015) as part of a regional afforestation and reforestation campaign, in accordance with national priorities and programmes of Member States;
- (viii) Evolve national plans, and where appropriate regional projects, on protecting and safeguarding the archeological and historical infrastructure of South Asia from the adverse effects of Climate Change;
- (ix) Establish institutional linkages among national institutions in the region to, among others, facilitate sharing of knowledge, information and capacity building programmes in climate change related areas;

- (x) Commission a SAARC Inter-governmental Marine Initiative to strengthen the understanding of shared oceans and water bodies in the region and the critical roles they play in sustainable living to be supported by the SAARC Coastal Zone Management Center;
- (xi) Stress the imperative of conservation of bio-diversity and natural resources and monitoring of mountain ecology covering the mountains in the region;
- (xii) Commission a SAARC Inter-governmental Mountain Initiative on mountain ecosystems, particularly glaciers and their contribution to sustainable development and livelihoods to be supported by SAARC Forestry Center;
- (xiii) Commission a SAARC Inter-governmental Monsoon Initiative on the evolving pattern of monsoons to assess vulnerability due to climate change to be supported by SAARC Meteorological Research Center;
- (xiv) Commission a SAARC Inter-governmental Climate-related Disasters Initiative on the integration of Climate Change Adaptation (CCA) with Disaster Risk Reduction (DRR) to be supported by SAARC Disaster Management Center;
- (xv) Complete the ratification process for the SAARC Convention on Cooperation on Environment at an early date to enable its entry into force; and
- (xvi) The Inter-governmental Expert Group on Climate Change shall meet at least twice a year to periodically monitor and review the implementation of this Statement and make recommendations to facilitate its implementation and submit its report through the Senior Officials of SAARC to the SAARC Environment Minister

Annexure - VII: Term of Reference for the SAARC Inter-governmental Mountain Initiative

(Prepared by SAARC Forestry Centre)

1. Thimphu Statement on Climate Change

The Thimphu Statement on Climate Change adopted by the Heads of State or Government at the Sixteenth SAARC Summit (Thimphu, 28-29 April 2010), among others, calls for the commissioning of a “SAARC Inter-governmental Mountain Initiative on mountain ecosystems, particularly glaciers and their contribution to sustainable development and livelihoods to be supported by SAARC Forestry Center”.

2. Background

The Mountains of South Asia spanning from Afghanistan to Bhutan and the north-eastern states of India is impacted by climate change. There have been reports of rapid reduction in glaciers that will have profound implications on the future of fresh water resources in South Asia. The high Himalayan and the inner Asian ranges have the most highly glaciated areas outside the Polar Regions. The Himalayan Range alone has a total area of 33,050 km² of glaciers or 17% of mountain areas with a total ice volume of roughly 3,421 km³ which provides important short and long-term water storage facilities. As a result of the cumulative and cascading effects of climate change, the impacts on the environment, social, and economic development of the mountain people of South Asia will be enormous.

Climate Change was the theme of the Sixteenth SAARC Summit (Thimphu, 28-29 April 2010). In view of the adverse impacts of climate change on the diverse and fragile ecosystems of South Asia including the lives and livelihoods of the people, the Heads of State or Government at the Sixteenth SAARC Summit adopted the Thimphu Statement on Climate Change. The Thimphu Statement on Climate Change, among others, agreed to commission a SAARC Inter-governmental Mountain Initiative supported by the SAARC Forestry Centre (SFC), Thimphu, Bhutan. The Thimphu Statement on Climate Change underscores the critical importance of glaciers and their contribution to sustainable development and livelihoods for the people of South Asia.

South Asia is endowed with a vast mountain ecosystem that provides a range of important environmental services that are critical for sustaining lives and livelihoods of millions of people, particularly mountain communities. The decision to commission a SAARC Inter-governmental Mountain Initiative by the Heads of State or Government of the SAARC is a reaffirmation of South Asia's commitment to protect, conserve and manage the fragile mountain ecosystems of the region for the benefit of present and future generations. The health of mountain ecosystems would also have an impact on communities and the environment in lower areas.

3. Objectives

The objectives of the SAARC Inter-governmental Mountain Initiative shall be as follows:

- (i) To protect and sustainably manage the mountain ecosystems of South Asia;
- (ii) To provide a platform for dialogue and cooperation among experts/scientists/institutions/agencies from the region dealing with mountain ecosystems and their sustainable development, use and management;
- (iii) Develop a scientific knowledge base on climate data, glaciers, glacial lakes and mountain resources;
- (iv) Determine the impacts of climate change on the mountain ecosystems/resources, biodiversity and the livelihoods of the mountain people and develop appropriate strategies;
- (v) Develop and implement mitigation and adaptation measures vis-à-vis the adverse impacts of climate change on mountain ecosystems/resources, biodiversity and sustainable development;
- (vi) Establish institutional linkages and networks of experts from the region working on mountain ecosystems/resources to promote sharing of knowledge, expertise, information, and technology transfer;
- (vii) Develop early warning systems on glacial lake outburst floods (GLOF) to minimize loss of life and damage to property and infrastructure;
- (viii) Develop capacities of national institutions/agencies particularly in the area of glacial studies and threats to mountain ecosystems/resources; and
- (ix) Develop an Action Plan for the South Asian region to address the threats posed to mountain ecosystems and communities including the concomitant impacts on communities in lower areas that are dependent on mountain ecosystems.

4. Scope

The SAARC Inter-governmental Mountain Initiative will undertake policy, regulatory and institutional dialogue among the Member States of SAARC regarding the protection and sustainable development, use and management of mountain ecosystems/resources such as glaciers and glacial lakes, high altitude freshwater perennial lakes, forests and biodiversity, among others. The Mountain Initiative will undertake scientific studies, data collection and assess the health of mountain ecosystems and prescribe mitigation/adaptation measures and other programs/activities to address the threats posed by climate change to mountain ecosystems/resources and communities. It will bring together experts/scientists and relevant agencies/institutions in the region dealing with glaciers, glacial lake outburst floods (GLOF), bio-prospecting, biodiversity conservation, mountain tourism and mountain livelihoods, among others, to engender collaborative endeavors and the development of joint projects/programs to preserve, protect and sustainably manage mountain ecosystems/resources. Projects/programs will be developed to enhance the livelihoods of mountain communities and to protect mountain habitats. Capacity building measures will also be developed to enable Member States to better understand the threats posed by climate change and to undertake research on mountain ecosystems/resources and their contribution to sustainable development and livelihoods.

5. Expected Outcome

- (i) Establish a network of experts/institutions/agencies from the region that deal with mountain ecosystems/resources;
- (ii) Develop an Integrated Plan of Action detailing concrete measures/programs/projects for the sustainable development, use and management of mountain ecosystems/resources;
- (iii) Compile data/information on mountain ecosystems/resources and mountain communities of SAARC;
- (iv) Recommend ways to promote regional cooperation on trans-boundary mountain issues, early warning systems for GLOF, biodiversity conservation and ecosystem connectivity of mountain ecosystems through sharing of knowledge, expertise, information, and technology knowledge and holding of trainings, workshops, seminars and capacity building programmes; and
- (v) Engender greater understanding about the importance of mountain ecosystems/resources.

6. Implementation Modalities

The SAARC Inter-governmental Mountain Initiative will be commissioned after the TOR has been considered and approved by the Intergovernmental Expert Group on Climate Change (IGEG-CC). The first meeting of the IGEG-CC may consider the TOR and recommend ways and means to commission the Mountain Initiative. The primary responsibility for implementation of the Mountain Initiative will rest with Member States. The IGEG-CC will periodically review and monitor the implementation of the Mountain Initiative. The SAARC Secretariat and the SAARC Forestry Center will support and facilitate the implementation of the Mountain Initiative.

**Annexure - VIII: S Dhaka Declaration on Climate Change AARCIGEG.CC-
II/04**

South Asian Association for Regional Cooperation



**Second Meeting of the Inter-governmental Expert Group on
Climate Change**

SAARC Secretariat, Kathmandu, 16 – 17 April 2012

SAARCIGEG.CC-II/04

DHAKA DECLARATION ON CLIMATE CHANGE

(Adopted by a SAARC Ministerial Meeting on Climate Change)

Dhaka, 3 July 2008

We the Ministers of the South Asian Association for Regional Cooperation (SAARC), from Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka, having met at Dhaka, Bangladesh on 3 July 2008 at the Ministerial Meeting on Climate Change,

Renewing our commitment to the SAARC Declaration on Climate Change adopted by the Twenty-ninth session of the Council of Ministers held on 7th December 2007 in New Delhi, the Rio Declaration on Environment and Development and the provisions of Agenda 21, the Declaration made at Johannesburg, South Africa in 2002 during the World Summit on Sustainable Development together with the outcomes and action plan adopted at the Summit,

Considering that climate change is substantively the result of the GHG emissions by the developed world for over two centuries, now posing as a direct threat to sustainable development and the achievement of the Millennium Development Goals (MDGs) in the developing countries, which have little or no responsibility for the current process of climate change,

Further considering that economic and social development and environmental protection are interdependent and mutually reinforcing, and are essential for food security and a better quality of life that is in serious jeopardy due to the disasters caused by climate change,

Recognizing that the SAARC region is most vulnerable to climate change and thereby seriously affecting our agricultural production, crippling our vital infrastructures, diminishing our natural resources and limiting our development options for the future,

Considering also that the aforesaid changes may threaten biodiversity, rendering the livelihood of our people to serious risk, hindering the achievement of the MDGs, and thwarting sustained economic growth that is essential to survive in the present globalized economy,

Recognizing that sustainable development is the best and most appropriate way to address the threat of climate change and accelerating the process of development is essential in order to build up capacity in the region to cope with likely adverse effects of climate change.

Acknowledging the importance of the United Nations Framework Convention on Climate Change and the progress made in the thirteenth Conference of the Parties held in Bali, Indonesia in December 2007 with the adoption of the decisions commonly called the *Bali Road Map including the Bali Action Plan* with its four building blocks – Mitigation, Adaptation, Technology Transfer, and Finance and Investment,

Acknowledging also that the Member States of the SAARC region, while safeguarding their interest through mutual consultations to meet the challenges posed by climate change,

Being aware of the diversity and commonality of interest in the economy, culture, and natural-resource-endowments of the SAARC region, that contain the high mountain ranges with their unique ecosystems, low lying areas, and Small Island States, hills and mountains that offer livelihood for the people, the vast ocean and the seas, the richly endowed biodiversity resources that include the coral reefs and the mangroves, the rocky and sandy deserts, numerous rivers and estuaries that offer livelihood opportunities to millions of our people, which are to be protected for the present and the future generations,

Noting the urgency of the immediate need for dealing with the onslaught of climate change including sea level rise, on meeting food, water and energy needs, and taking measures to ensure the livelihood security of our peoples in the SAARC region,

Having regard to the needs of our countries to initiate programmes for adaptation measures to diverse impacts of climate change, monitoring, early warning, disaster management, capacity building and other measures, which, if pursued collectively, will synergize the outcomes of national efforts, and international cooperation, which are essential in this regard,

Also noting the positive steps taken in terms of awareness raising on the environment over the years that could benefit future measures for adaptation in the present expected scenario of climate change, and other such steps for further upgrading our efforts with appropriate human resources development and cooperation with civil society and academia, that exists within our region,

Make the following declaration:

1. ***Commit*** ourselves to promote programmes for advocacy and mass awareness raising on climate change and to inculcate habits towards a low carbon society, including incorporation of climate change and related science-based educational material in educational curricula, as per SAARC procedure and practices.
2. ***Resolve*** to cooperate on climate change issues for capacity building, including the development of CDM projects and DNA and on incentives for removal of GHG by sinks, and exchange of information of best practices, sharing of the results of research and development for mitigating the effects of climate change and undertaking adaptation measures, and for enhancing south-south cooperation on technology development and transfer, as per established SAARC norms.
3. ***Agree*** to initiate and implement programmes and measures as per SAARC practice for adaptation for dealing with the onslaught of climate change to protect the lives and livelihood of our people for food, water and energy securities and call upon Annex-I countries to fulfill their commitments as per UNFCCC for providing additional resources.
4. ***Further commit*** ourselves to implement the SAARC Action Plan on Climate Change.
5. ***Adopt*** this Declaration and the SAARC Action Plan on Climate Change.

Annexure - I X: SAARC Action Plan on Climate Change SAARCIGEG.CC-II/05

South Asian Association for Regional Cooperation



Second Meeting of the Inter-governmental Expert Group on Climate Change

SAARC Secretariat, Kathmandu, 16 – 17 April 2012

SAARCIGEG.CC-II/05

SAARC ACTION PLAN ON CLIMATE CHANGE

(Adopted by the SAARC Ministerial Meeting on Climate Change Dhaka, 3 July 2008)

A. Introduction

The Fourteenth SAARC Summit (New Delhi, 3-4 April 2007) expressed "deep concern" over the global climate change. As a follow up action, the New Delhi Declaration called for pursuing a climate resilient development in South Asia. As a way forward and a first step, Bangladesh proposed to organize an expert meeting.

At the Twenty-ninth session of the SAARC Council of Ministers (New Delhi, 7-8 December 2007), the issue of climate change, particularly the increasing vulnerability of the region due to environmental degradation and climate change were discussed. The ministers felt that given all vulnerabilities, inadequate means and limited capacities, we need to ensure rapid social and economic development in our region to make SAARC climate change resilient. They welcomed the offer of Bangladesh to hold a SAARC Ministerial Meeting on Climate Change to be preceded by an Expert Group Meeting on Climate Change.

After detailed discussion, the Expert Group Meeting recommended a draft SAARC Action Plan on Climate Change as follows:

B. Objectives of the SAARC Action Plan on Climate Change

The action plan would seek to achieve the following objectives:

- To identify and create opportunities for activities achievable through regional cooperation and south-south support in terms of technology and knowledge transfer.
- To provide impetus for regional level action plan on climate change through national level activities.
- To support the global negotiation process of the UNFCCC such as the Bali Action Plan, through a common understanding or elaboration of the various negotiating issues to effectively reflect the concerns of SAARC Member States.

C. Thematic Areas of the Regional Action Plan on Climate Change

Specific areas of action in the regional action plan for climate change for SAARC region are to be identified according to the priorities outlined and actions envisaged in the national action plan of the SAARC Member States. However, with a view to facilitate the process of formulating Action Plan, consistent with the national action plans of SAARC Member States, possible thematic areas are, below:

Thematic area one: Adaptation to Climate Change

- Adaptation to climate change impacts and risks in vulnerable communities, locations and ecosystems,
- Adaptation in sectors (e.g. water, agriculture, fisheries , health and biodiversity)
- Adaptation to extreme climate events (e.g. flood, cyclone, glacial lake outburst, droughts and heat and cold waves)
- Adaptation to climate change impact (e.g. sea level rise, salinity intrusion, glacial melt and coastal and soil erosion,)
- Adaptation suited to urban settlements, coastal structures and mountain terrain.

Thematic area two: Policies and Actions for Climate Change Mitigation

- Sharing of best practices on nationally appropriate mitigation actions (e.g. energy, waste management and transport)
- Capacity building for developing CDM projects including DNA and stakeholders.
- Sharing of best practices on sustainable forest management based on experiences.

Thematic Area Three: Policies and Actions for Technology Transfer

- Technology needs assessment including R&D and capacity development
- Assessing barriers to technology development for adaptation and mitigation options.

Thematic Area Four: Finance and Investment

- Methods for assessing financing needs to deal with climate change in the short, medium and long term,
- Climate change projects should be given priority and be financed as per SAARC norms.
- Determine the quantum of additional funding required to implement the action
- Plans as identified under various thematic areas.

Thematic Area Five: Education and Awareness – New Delhi Work Program

- Development of a tool kit on mass awareness raising on climate change
- Incorporating climate change awareness in educational curricula
- Involvement of the mass media on climate change issues with adequate information

Thematic area Six: Management of impacts and risks due to climate Change

- Climate risk modeling and capacity building in the region on impact assessment of climate change.
- Sharing of information and capacity building in the management of climate change impacts and risks through cooperation among SAARC member states in early forecasting, warning and adaptation measures,
- Cooperation amongst the SAARC member states in exchange of information on climate and climate change impacts (e.g. sea level rise, glacial melts, droughts, floods, etc.).
- Cooperation and sharing of good practices in disaster management.

Thematic area Seven: Capacity building for international negotiations

- Capacity building of Member States in the international negotiation process.

D. Priority Action Plan

- Capacity building for CDM Projects
- Exchange of information on disaster preparedness and extreme events
- Exchange of meteorological data.
- To consider capacity building and exchange of information on climate change impacts (e.g. Sea level rise, glacial melting, biodiversity and forestry).
- Mutual consultation in international negotiation process.

Media briefing as and when required.

E. Duration – Time Line

The Action Plan is proposed for an initial period of three years (2009-2011).

F. Implementation Responsibility

The primary responsibility for implementing the Action Plan on Climate Change rests with the national governments. With regard to regional cooperation, a mechanism should be agreed upon to effectively use the existing institutional arrangements of SAARC by giving clear directions and guidance. As for national level implementation, each government has to undertake its regulatory measures, technological interventions, stake holder's participation and institutional arrangements.

G. Reporting and Reviewing

The review of the action plan should be periodically undertaken by the appropriate institutional mechanism in SAARC at the technical level. Their national reports on the implementation will be submitted to the SAARC Secretariat for subsequent consideration by the Ministers.

Annexure - X: Report of the First Meeting of the Inter-governmental Expert Group on Climate Change, Colombo, 29 – 30 June 2011, SAARCIGEG.CC-II/06

South Asian Association for Regional Cooperation



Second Meeting of the Inter-governmental Expert Group on Climate Change

SAARCIGEG.CC-II/06

Report of the First Meeting of the Inter-governmental Expert Group on Climate Change, Colombo, 29 – 30 June 2011

REPORT

The Heads of State or Government of Member States of SAARC at the Sixteenth SAARC Summit (Thimphu, 28-29 April 2010), among others, adopted the Thimphu Statement on Climate Change and directed that the recommendations contained therein be implemented in earnest. The Thimphu Statement on Climate Change outlines a number of initiatives to be implemented by Member States at the national and regional level to address the adverse effects of climate change.

2. The Inter-governmental Expert Group on Climate Change (IGEG.CC), established by the Thimphu Statement on Climate Change, is required to monitor and review the implementation of the Thimphu Statement on Climate Change and make recommendations to facilitate its implementation. The Report of the IGEG.CC will be submitted to the SAARC Environment Ministers through the Senior Officials Meeting preceding the Ministerial Meeting. The Ninth Meeting of the SAARC Environment Ministers preceded by the Fourth Meeting of the Technical Committee on Environment and Forestry is scheduled to be held in Thimphu in 2011.

3. During the Thirty-eighth Session of the Standing Committee (Thimphu, 6-7 February 2010), Sri Lanka offered to host the First Meeting of the IGEG.CC. Accordingly, at the invitation of the Government of Sri Lanka, the First Meeting of IGEG.CC was held in Colombo from 29-30 June 2011. The Meeting was attended by participants from Afghanistan, Bhutan, India, Nepal and Sri Lanka. The List of Participants is at **Annex-I**.

Inaugural Session

4. Dr. R. H. S. Samaratinga, Secretary, Ministry of Environment, Government of Sri Lanka welcomed all delegates to the First Meeting of the Inter-Governmental Expert Group on Climate Change. He underscored the importance of the meeting and expressed the hope that the meeting will result in a fruitful outcome. He wished all delegates a very pleasant stay in Colombo.

5. Mr. Pema L. Dorji, Director, SAARC Secretariat, delivered a statement on behalf of the Secretary General of SAARC, H.E. Uz. Fathimath Dhiyana Saeed. He expressed his deep appreciation to Hon. Anura Priyadarshana Yapa, Minister of Environment, Government of Sri Lanka for gracing the Inaugural Session. He thanked the Government of Sri Lanka for hosting this important meeting and stated that all Member States of SAARC are highly vulnerable to the adverse impacts of climate change, particularly the millions of poor who are most at risk. He highlighted the impacts of climate change on South Asia as outlined in the Fourth Assessment Report of the Inter-governmental Panel on Climate Change. He stated that adverse impacts of climate change will hamper the achievement of the SAARC Development Goals (SDGs) and impact negatively on the lives and livelihoods of millions in the region. He stated that since 1987, the Leaders of SAARC have accorded high priority towards strengthening and intensifying regional cooperation to combat climate change and recalled the various initiatives being undertaken by SAARC. He added that the adoption of the Thimphu Statement on Climate Change at the Sixteenth SAARC Summit was a reflection of the commitment and resolve of all Member States at the highest level to address the challenges posed by climate change. He urged the IGEG.CC to finalize the Terms of Reference to commission the initiatives contained in the Thimphu Statement and also emphasized on the need to ensure timely implementation of the Thimphu Statement. He also requested Member States to ensure that national level initiatives contained in the Thimphu Statement are implemented in earnest. The full text of his statement is at **Annex-II**.

6. Hon. Anura Priyadarshana Yapa, Minister of Environment, Government of Sri Lanka, in his Inaugural Address extended a warm welcome to all delegates. He stated that climate change was a pressing problem and that all nations of the world were looking for long-term solutions through mitigation and adaptation. He added that the Fourth Assessment Report of the Inter-governmental Panel on Climate Change has conclusively established that climate change is taking place as a result of human activity and that today we are all experiencing the negative impacts of climate change. He stated that the Thimphu Statement adopted by the Leaders of SAARC at the Sixteenth SAARC Summit was an important initiative to address the challenges posed by climate change in the region. He expressed the hope that the meeting will come up with useful recommendations and future directions for the consideration of the SAARC Environment Ministers. The full text of his statement is at **Annex-III**.

I. Opening of the Meeting

7. As per SAARC practice, the First Meeting of the IGEG.CC was opened by Mr. Pema L. Dorji, Director, SAARC Secretariat, as Representative of the Secretary General of SAARC. He conveyed the best wishes of the Secretary General of SAARC for the success of the meeting.

Annexure - XI: List of Delegates

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